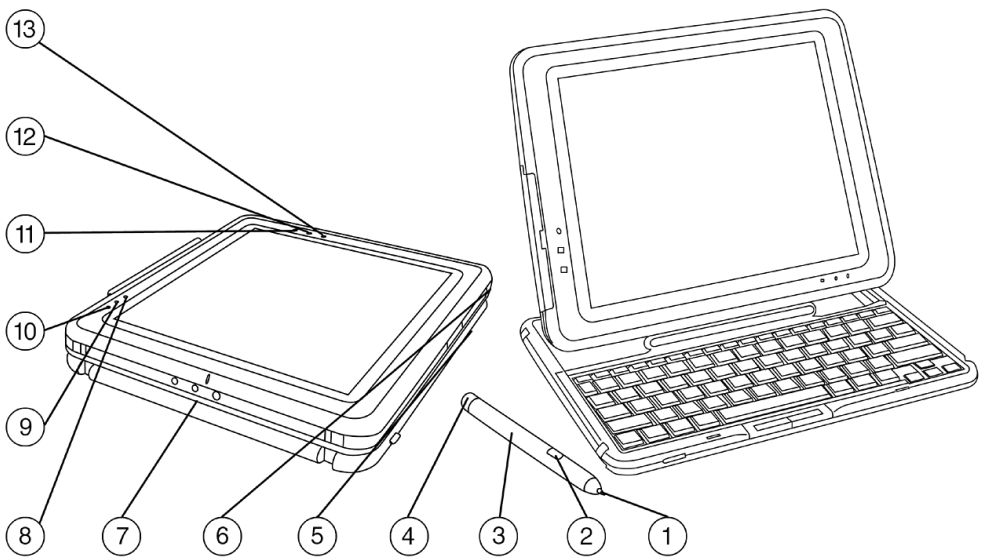
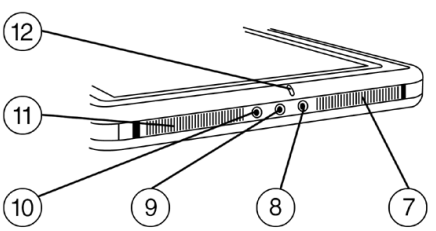
Overview

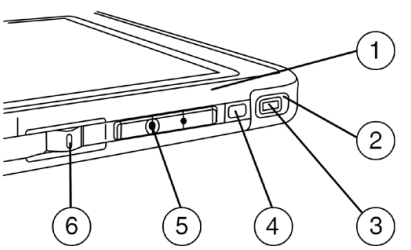


1. Pen Tip
2. Pen Button
3. Pen Barrel
4. Pen Tether Eyelet
5. Battery Bay
6. Power Switch
7. Mobile Keyboard (attached)
8. AC Adapter Light
9. Battery Light
10. Wireless LAN/Bluetooth™ Activity Light
11. Tablet PC Input Panel Launch
12. Journal Launch Button
13. Rotate Button

Front View

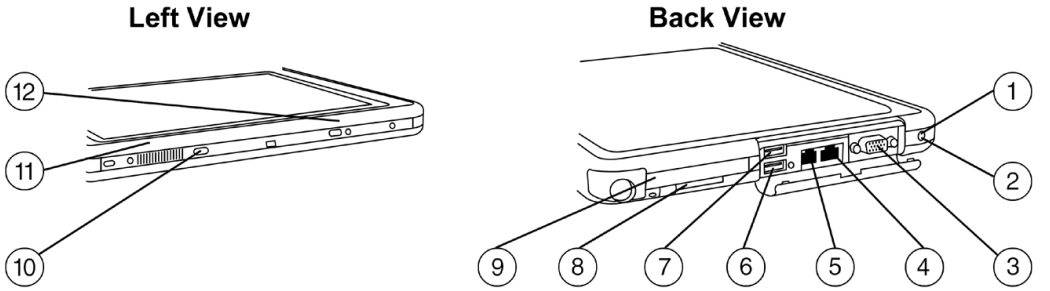


Right View



1. Integrated Antenna
2. Power Switch
3. Power/Standby Light
4. Display Toggle (F4) Button
5. Windows Security Button (CTRL+ALT+DEL)
6. Jog Dial
7. Speaker (1 of 2)
8. Microphone Jack
9. Headset Jack
10. Audio-out Jack
11. Speaker (1 of 2)
12. Microphone

Overview



1. AC Power Connector
2. Integrated IR
3. External Monitor Connector
4. RJ-45 Network Jack
5. RJ-11 Telephone Jack
6. External Multibay Connector (USB 2.0)
7. USB 2.0 Connector
8. Secure Digital (SD) Slot
9. PC Card Slot
10. Keyboard Connector
11. Antenna (not visible from outside of tablet PC)
12. Integrated Bluetooth

At A Glance

- Award-winning design
- Microsoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2
- Intel® Pentium® M and Celeron® M Ultra Low Voltage processors
- Intel 855PM Chipset with rich graphics from NVIDIA – GeForce 4 Go 420 32MB (4X AGP)
- Durable magnesium casing
- Weighs 3.1 lb(1.4 kg) – with keyboard 4.0 lb(1.8 kg)
- Approximately 0.8 in(2.0 cm) thin
- 10.4-inch XGA TFT display with sparkle-free glass
- Starting with 256 MB or 512 MB of SDRAM upgradeable to 2 GB
- Storage available ranging from 30 GB to 80 GB
- Integrated mini PCI 56K modem plus 10/100 NIC
- Type III Mini PCI integrated WLAN - 802.11b, 802.11b/g and 802.11a/b/g WLAN options
- Integrated Bluetooth™ on select models
- Dedicated Secure Digital (SD) slot for removable media
- Integrated IR
- Battery-free, pressure sensitive pen for the ultimate writing experience (application must support pressure sensitivity)
- Additional HP Security Lock Slot

What's Special

- Flexible design with great performance!
- Ultra-light weight and portable
- Warm swap battery support
- Innovative keyboard attachment
- Docking with or without keyboard
- Easy transitions with multi-monitor docking profiles
- Magnesium alloy case and high quality digital pen with tether

Standard Features

Processor and Chipset	Intel Pentium M 733* (Ultra Low Voltage 1.1-GHz processor, 2-MB cache and 400-MHz Front Side Bus) Intel Pentium M 713* (Ultra Low Voltage 1.1-GHz processor , 1-MB cache, 400-MHz Front Side Bus) Intel Pentium M Ultra Low Voltage 1.0-GHz processor with 1-MB cache and 400-MHz Front Side Bus Intel Celeron M 353* (Ultra Low Voltage 900-MHz speed, 512-KB cache, 400-MHz front side bus) Mobile Intel Celeron M Ultra Low Voltage 800-MHz processor with 512-KB cache and 400-MHz Front Side Bus Intel 855PM chipset NOTE: Not available in all regions. *NOTE: Intel's numbering is not a measurement of higher performance.	
Operating System	Pre-installed	Microsoft Windows XP Tablet PC Edition 2005 (since Nov 04)
Display	Internal	10.4-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal) NOTE: All products have at least 100 degree wide viewing angle. SKUs available with 160 or 100-degree viewing angle.
	External	Up to 32-bit per pixel color depth Supports 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 1024, or 1600 x 1200 resolutions up to 100-Hz refresh rate, dependent upon monitor capability, and resolution and color depth settings
Memory	Standard 512-MB (333-MHz) SDRAM on select models with Pentium M processor Standard 256-MB (266-MHz) SDRAM on select models with Celeron M processor Maximum 2-GB (333-MHz) SDRAM NOTE: Memory is upgradeable to 2 GB with 1 GB (333-MHz) DRAM in each memory slot. One memory slot is available for user configuration. The other slot is factory configured or can be upgraded through an HP authorized service provider. NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility.	
Graphics	NVIDIA GeForce 4 Go 420 with 32MB (4X APG)	
Audio	16-bit stereo sound 2 stereo speakers Headphone out, microphone jack, and headset jack	

Standard Features

Communications	Type III Mini PCI integrated WLAN Internal MDC 56K high speed modem Internal 10/100 NIC Integrated Bluetooth (on select models) NOTE: Designed only to allow faster downloads from high speed compliant sources. Maximum achievable download transmission rates currently do not reach 56 KB/s, and will vary with line conditions. NOTE: Communication availability is subject to country regulatory approval.
Command Controls Buttons	The tablet PC comes with Command Control Buttons designed to increase customer productivity by providing one-touch access to rotate screen, favorite Internet destinations, files, or applications. • 3 programmable pen activated buttons (on top front panel) • 3 programmable side buttons (Qmenu, Esc, and Tab commands) • 2 additional specific function buttons (Windows security (Ctrl+Alt+Del) and Display toggle)
Keyboard	95% of full-sized 101-key compatible keyboard with isolated, inverted-T cursor control keys, and right-control key NOTE: A USB Keyboard is required to unbundle software and edit BIOS settings and may be required to install software.
Pointing Device	Battery-free digital pen with tether (one-year warranty) Detachable keyboard with pointstick NOTE: Handwriting recognition software is available in Microsoft Windows XP Tablet PC Edition.
PC Card Slots	One Type II PC Card Slot that supports both 32-bit CardBus and 16-bit PCMCIA Cards
Removable Media	One Secured Digital (SD) slot
Storage	Internal Hard Drive — 30-GB, 40-GB (4200 rpm) or 40-GB, 60-GB, 80-GB (5400 rpm) SMART Hard Drives NOTE: External MultiBay or Tablet PC Docking Station required for MultiBay drives.

Standard Features

Multimedia

Integrated 16-bit Sound Blaster Pro-compatible stereo audio
2 Integrated stereo speakers and microphone
Stereo Headphone-out
Mono Headphone-out/Microphone in
Software MPEG1 support

DVD movie playback software available with

- DVD-ROM Drive with DVD movie playback
- DVD/CD-RW Combo Drive
- DVD+RW Drive

NOTE: Voice recognition software available in Microsoft Windows XP Tablet PC Edition. An external boom microphone is recommended for voice recognition.

Interfaces

PC Card Slot	1, Type II
Secured Digital (SD) Slot	1 removable media (not SDIO)
External Monitor/Projector	1 Analog VGA
Stereo Headphone	1, 3.5 mm stereo headphone jack
Mono Headphone/ Microphone	1, 2.5 mm headset jack
Stereo Microphone in	1, 3.5 mm microphone jack
Modem	1 RJ-11
NIC	1 RJ-45
USB 2.0 Port	2, 1 with support for External MultiBay
LED Status Indicators	3 (Power connection, battery charge, and wireless active)
AC Power	1
Fast Infra-red (VFIR)	1

Security

Setup Password with pen support
Power-On Password with pen support
DriveLock – requires password to access hard drive
Enabled by PC Card options
BIOS WLAN lock – prevents the replacement with unauthorized WLAN cards
2 HP Security locks – physically secure unit while in tablet, docking, or notebook modes

Standard Features

Software	**Pre-installed Software**	HP Mobile Printing for Notebooks HP Help and Support (XP Only) Safety and Comfort Guide Adobe Acrobat® Reader v. 5.10 Microsoft Reader v. 2.5 Zinio Reader v.1.4 Sun Java 1.4 Windows Media Player 9 for XP HP Tablet PC Tour *Intervideo WinDVD Playback Software v. 4* (Pre-loaded)
	Recommended software/services	Availability of recommended software applications or services may vary by region and may require additional purchase and/or subscription FranklinCovey TabletPlanner v. 2.0 (30 day trial period) MindJet MindManager 2002 for Tablet PC (21 day trial period) Corel Grafigo v. 1.0 (promotional free download) Zinio (see Digital Magazine icon on Tablet PC desktop for more information) ScanSoft Omniform Filler 5.1 and Dragon Naturally Speaking Standard Edition 7.1 (available as a special configuration)
	Additional software available through the web	HP Client Manager Software HP ProtectTools Smart Card Security Manager QuickLook for the HP Tablet PC TC1100 series
	*NOTE: Software is loaded on the hard drive and must be installed by running the Software Setup utility.	

System Recovery

Each unit is shipped with a recovery CD kit containing Operating System Recovery and Driver/Application Recovery CDs. These CDs allow users to either recover or repair the tablet's operating system and select drivers without losing personal data. The Operating System CD also provides the option of reinstalling the operating system software provided with the tablet.

Power Supply

65W External AC Adapter

Battery

40W/Hr internal main rechargeable Lithium-Ion battery (one-year warranty)

Bridge battery - Allows user to swap main battery with the system in standby mode.

Battery Re-Charge Time	System in OFF mode or Standby	3 hours
	System ON (depending on system power consumption)	3-5 hours

Power Conservation

Instant-on via Standby
Hibernation
ACPI compliant

MultiBay Devices (with optional External MultiBay or Docking Station)

Under Microsoft Windows XP Tablet PC Edition, MultiBay devices may be hot swapped. Writeable drives should only be swapped with power off. The Common MultiBay devices are compatible across TC1000 and TC1100 tablets, and multiple business notebook platforms enabling a lower total cost of ownership.

Standard Features

Wireless Devices

The HP tablet TC1100 supports a range of secure, integrated wireless LAN options featuring support for the latest industry standards. Integrated Bluetooth is also an option and can be combined with any one of the supported wireless LAN options.

All integrated wireless LAN options	Wi-Fi certified Cisco Compatible Extensions support Wired Equivalent Privacy (WEP) support up to 128bit keys Wi-Fi Protected Access (WPA) support 802.1x standards support including EAP-TLS, Protected EAP (PEAP) and Cisco-EAP (LEAP) Dual antennas integrated in the display enclosure
HP W500 802.11a/b/g	Integrated support for 802.11a, b and g Up to 54mbps throughput performance Advanced Encryption Standard (AES) support
Intel PRO/Wireless 2100 802.11b wireless LAN	Intel® Centrino mobile technology Integrated support for 802.11b Up to 11mbps throughput performance
Integrated Bluetooth	Designed to the Bluetooth v1.1 specification

Docking

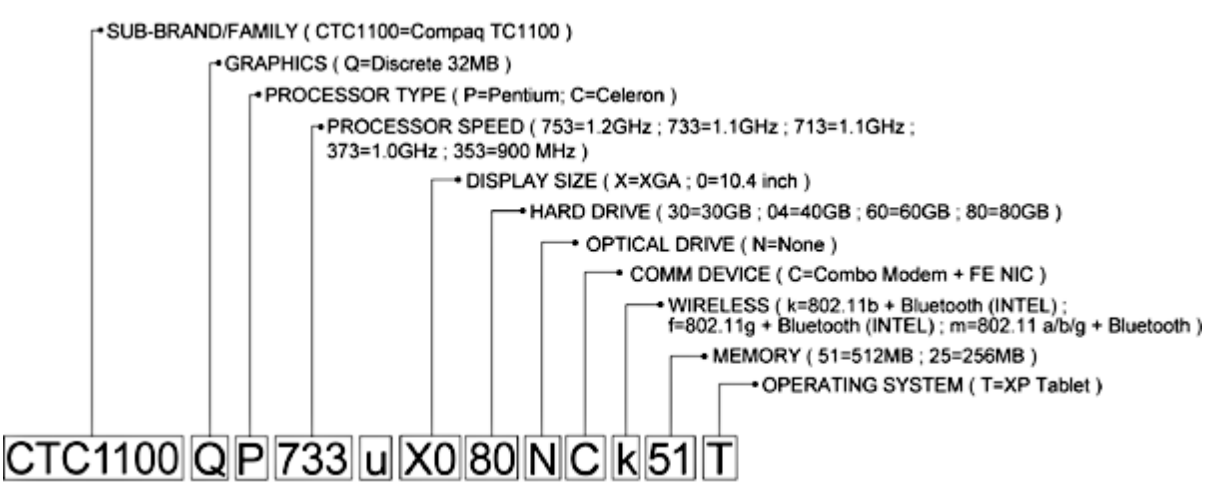
The HP Tablet PC Docking Station provides simple and convenient port management MultiBay drives. Features include NIC pass through, four USB 2.0 including 1 Powered External USB MultiBay connector, VGA, line in/line out, and MutliBay slot. The docking solutions are compatible across TC1000 and TC1100 tablets enabling a lower total cost of ownership.

Service and Support

HP Services includes a One-Year or Three-year, Worldwide Limited Warranty, pick-up or carry-in (in select countries) and toll-free 7 x 24 hardware technical phone support.

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.

The Etymology of a Model name:


SUB-BRAND/FAMILY (CTC1100=Compaq TC1100)
GRAPHICS (Q=Discrete 32MB)
PROCESSOR TYPE (P=Pentium; C=Celeron)
PROCESSOR SPEED (753=1.2GHz ; 733=1.1GHz ; 713=1.1GHz ; 373=1.0GHz ; 353=900 MHz)
DISPLAY SIZE (X=XGA ; 0=10.4 inch)
HARD DRIVE (30=30GB ; 04=40GB ; 60=60GB ; 80=80GB)
OPTICAL DRIVE (N=None)
COMM DEVICE (C=Combo Modem + FE NIC)
WIRELESS (k=802.11b + Bluetooth (INTEL) ; f=802.11g + Bluetooth (INTEL) ; m=802.11 a/b/g + Bluetooth)
MEMORY (51=512MB ; 25=256MB)
OPERATING SYSTEM (T=XP Tablet)
CTC1100 Q P 733 u X0 80 N C k 51 T

Options

Memory	256-MB 333-MHz RAM Memory Upgrade	DC389B
	512-MB 333-MHz RAM Memory Upgrade	DC390B
	1-GB 333-MHz RAM Memory Upgrade	DC890B
	NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility.	
MultiBay Devices	16X DVD+RW Drive	DG189A
	24X Combo DVD/CD-RW Drive	DC364B
	8X DVD Drive	DC352A
	MultiBay Diskette Drive	DC362A
	NOTE: MultiBay devices may only be used in External MultiBay or Docking Station MultiBay.	
MultiBay Storage	USB MultiBay Diskette Drive	DC362A
	60-GB MultiBay Hard Drive (5400 rpm)	DC894A
	80-GB MultiBay Hard Drive (5400 rpm)	DC920A
	NOTE: MultiBay hard drive options may only be used in External MultiBay or Docking Station MultiBay.	
Other Storage Devices	Digital Drive with 128-MB SD card	DL702A
	External 40-GB USB hard drive	DQ549A
Expansion Bases	Tablet PC Docking Station	DC911A#xxx
	External MultiBay	DC373A#B13
	USB 2.0 Hub	DG954A
Power	Tablet PC Lithium-Ion battery pack (internal)	DC907A
Common Power Solutions	Battery Charger	DF933A#XXX
	65W AC Adapter	DC359A#XXX
	90W Auto Adapter	DC303B
	90W Aircraft Cables	DC899A
	90W AC Adapter	DV574A#XXX
Input Devices	Tablet PC Pen with eraser	DM685A
	External Enhanced III Keyboard (carbon)	DC168B#XXX
	USB (2)Button Mouse (carbon)	DC369A
	HP Travel Mouse	F2100A

Options

Security	Security Cable Lock	PC766A
	Smart card reader	DC350B
	Smart card	DR032A
Cases	HP Entry Value	DE642A
	Executive Leather	DC917A
	Portable Grip	DK504A
	Rugged Case	DK503A

HP Compaq Tablet PC TC1100

Standard memory plus optional memory for the Celeron model. Not all configurations shown.

Memory		Factory or HP authorized service provider configured	User configurable
Standard	256 MB	256 MB (266 MHz)	Empty
Optional	512 MB	256 MB (266 MHz)	256 MB (333 MHz)[1]
Optional	768 MB	256 MB (266 MHz)	512 MB (333 MHz)[2]
Optional	1024 MB	512 MB (333 MHz)	512 MB (333 MHz)
Optional	1536 MB	512 MB (333 MHz)	1 GB (333 MHz)
Optional maximum	2 GB	1 GB (333 MHz)	1 GB (333 MHz)

Standard memory plus optional memory for the Pentium-M model. Not all configurations shown.

Memory		Factory or HP authorized service provider configured	User configurable
Standard	512 MB	512 MB (333 MHz)	Empty
Optional	768 MB	512 MB (333 MHz)	256 MB (333 MHz)
Optional	1024 MB	512 MB (333 MHz)	512 MB (333 MHz)
Optional	1536 MB	512 MB (333 MHz)	1 GB (333 MHz)
Optional maximum	2 GB	1 GB (333 MHz)	1 GB (333 MHz)

[1] Memory will run at 266 MHz.
[2] Memory will run at 266 MHz.

System Unit	Dimensions (H x W x D)	10.4-inch TFT panel display	10.8 x 8.5 x 0.8 in (27.4 x 21.6 x 2.0 cm)
	Weight	Approximate	3.1 lb (1.4 kg) Tablet PC only
			4 lb (1.8 kg) Tablet PC with keyboard
	Stand-Alone Power Requirements	Nominal Operating Voltage	14.8 VDC
		Peak Operating Power	40 W
	Temperature	Operating	50° to 95° F (10° to 35° C)
		Non-operating	-4° to 140° F (-20° to 60° C)
	Relative Humidity	Operating	10% to 90% relative humidity, non-condensing
		Non-operating	5% to 90% relative humidity, 101.6° F (38.7° C) maximum wet bulb temperature
	Shock	Operating	10 G, 11 ms, half-sine
		Non-operating	60 G, 11 ms, half-sine
	Vibration	Operating	0.5 G, 10 to 500 Hz, 0.5 Oct/Min sweep rate
		Non-operating	1.0 G, 10 to 500 Hz, 0.5 Oct/Min sweep rate
	Maximum Altitude (unpressurized)	Operating	0 to 10,000 ft (3,048 m), (14.7 to 10.1 psia)
		Non-operating	0 to 30,000 ft (9,144 m), (14.7 to 4.4 psia)

10.4-Inch Color TFT XGA Display	Dimensions (H x W)	9.29 x 6.82 in (23.6 x 17.3 cm)	
	Diagonal Size	10.4 in (26.41 cm)	
	Mounting	Internal Panel Supports, Flange Mounted	
	Number of Colors	Up to 16.8M	
	Contrast Ratio	150:1	
	Brightness	140 nits typical	
	Pixel Resolution	Pitch	0.264 x 0.264 mm
		Format	1024 x 768
		Configuration	RGB stripe
	Backlight	Edge Lit	
	Character Display	80 x 25	
	Wide Viewing Angle	100-degree wide viewing angle or 160-degree ultra wide viewing angle, depending on configuration	

Memory (optional)	Slot 1 (Factory and HP authorized service provider configurable only)	256-MB 266-MHz DDR	Standard with Celeron SKUs (may also use 333 MHz)
		256-MB 333-MHz DDR	
		512-MB 333-MHz DDR	Standard with Pentium SKUs
		1-GB 333-MHz DDR	
	Slot 2 (available)	256-MB 333-MHz DDR	
		512-MB 333-MHz DDR	
		1-GB 333-MHz DDR	

Technical Specifications

External AC Adapter	Weight	0.62 lb (0.28 kg)	
	Power Supply (Input)	Operating Voltage	90 to 260 VAC RMS
		Operating Current	1.7 A RMS
		Operating Frequency Range	47 to 63 Hz AC
Internal Lithium-Ion Battery Pack	Weight	0.65 lb (0.30 kg)	
	Cells	6-cell Lithium-Ion	
	Energy	Voltage	11.1 V
		Amp-hour capacity	3.6 Ah
		Watt-hour capacity	40 Wh
	Temperature	Operating (Charging)	32° to 104° F (0° to 40° C)
		Operating (Discharging)	14° to 122° F (-10° to 50° C)
		Non-operating	-4° to 140° F (-20° to 60° C)
	Battery Re-Charge Time	System in OFF mode or Standby	3 hours
		System ON (depending of system power consumption)	3 to 5 hours
Tablet PC Pen(s)	Pen with tether (standard)	Dimensions (Length)	5.1 in (130.1 mm)
		Weight	0.66 oz (18.7 g)
	Pen with eraser (optional)	Dimensions (Length)	5.1 in (130.1 mm)
		Weight	0.66 oz (18.7 g)
MultiBay DVD+RW/CD-RW Drive (optional)	MultiBay Drive	Dimensions (H x W x D)	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)
		Weight	0.55 lb (0.25 kg)
	Center Hole Diameter	15 mm	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	1.2 mm	
	Track Pitch	0.74 μm	
	Access Times (typical reads, including settling)	Random CD	< 175 ms
		Full-Stroke CD	< 285 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB/s (minimum)	

	Data Transfer Rate (typical, including settling)	DVD+R (2X max write)	2700 KB/s
		DVD+RW (2X max write)	2700 KB/s
		CD-R (16X max write)	2400 KB/s (150 KB/s at 1X CD rate)
		CD-RW (8X max write)	1200 KB/s (150 KB/s at 1X CD rate)
		CD-ROM (24X max read)	3600 KB/s (150 KB/s at 1X CD rate)
		DVD (8X max read)	10,800 KB/s (1352 KB/s at 1X DVD rate)
		Normal PIO Mode 4 (single burst)	16.6 MB/s
	Start-up Time	< 15 seconds	
	Stop Time	< 6 seconds	
MultiBay DVD/CD-RW Drive (optional)	**Dimensions**	0.5 x 5.22 x 5.46 in (1.35 x 13.28 x 13.88 cm)	
	Weight	0.551 lb (250 g)	
	Access Times	Random	<110 ms CD
			<130 ms DVD
		Full Stroke	<210 ms CD
			<225 ms DVD
	Max data transfer rate	24X CD-ROM	3,600 KB/s
		8X DVD	10,800 KB/s
		24X CD-R	3,600 KB/s
		24X CD-RW	3,600KB/s
	Transfer Mode	Multiword DMA Mode 2	
	Interface	EIDE	
	Supported Media (read)	CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM	
	Supported Media (write)	CD-R, CD-RW	
	Media Capacity	4.7 GB	
	Transport	Tray Loading	

Technical Specifications

MultiBay CD-RW Drive (optional)	MultiBay Drive	Dimensions (H x W x D)	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)
		Weight	0.74 lb (0.34 kg)
	Center Hole Diameter	0.59 in (1.5 cm)	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	0.047 in (1.2 mm)	
	Track Pitch	0.74 µm	
	Access Times (typical reads, including settling)	Random	< 150 ms
		Full-Stroke	< 225 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB/s (minimum)	
	Data Transfer Rate (typical, including settling)	Sustained (16X)	150 KB/s
		Sustained 4X CD-RW	5,520 KB/s
		Normal PIO Mode 4 (single burst)	16.6 MB/s
	Start-up Time	< 15 seconds	
	Stop Time	< 6 seconds	

MultiBay DVD-ROM Drive (optional)	MultiBay Drive	Dimensions (H x W x D)	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)
		Weight	0.66 lb (0.3 kg)
	Center Hole Diameter	0.59 in (1.5 cm)	
	Disk Diameter	12 cm/8 cm	
	Disk Thickness	0.43 in (1.09 cm)	
	Track Pitch	0.74 µm	
	Access Times (typical reads, including settling)	Random (typical)	< 180 ms DVD Media
		Full-Stroke (typical)	< 300 ms DVD Media
		Random (typical)	< 120 ms CD Media
		Full-Stroke (typical)	< 200 ms CD Media
	Cache Buffer	512 KB/s (minimum)	
	Data Transfer Rate (typical, including settling)	Max 24X CD	3600 KB/s (150 KB/s at 1X CD rate)
		Max 8X DVD	10,800 KB/s (1352 KB/s at 1X DVD rate)
		Normal PIO Mode 4 (single burst)	16.6 MB/s
	Start-up Time	< 12 seconds	
	Stop Time	< 3 seconds	

Technical Specifications

MultiBay 24X CD-ROM Drive (optional)	**MultiBay Drive**	Dimensions (H x W x D)	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)
		Weight	0.50 lb (0.23 kg)
	Applicable Disk	CD-ROM (Mode 1, 2 and 3), CD-XA ready (Mode 2, Form 1 and 2), CD-I ready (Mode 2, Form 1 and 2), CD-R (read only), CD Plus, Photo CD (Single and Multi-session), CD-Extra, Video CD, CD-WO (fixed packets only), CD-Bridge	
	Center Hole Diameter	0.59 in (15 mm)	
	Disk Diameter	12 cm, 8 cm	
	Disk Thickness	0.047 in (0.12 cm)	
	Track Pitch	1.6 μm	
	Access Times (typical reads, including settling)	Random	< 150 ms
		Full-Stroke	< 300 ms
	Audio Output Level	Line-out	0.7 Vrms
	Cache Buffer	128 KB	
	Data Transfer Rate (typical, including settling)	Sustained (16X)	150 KB/s (sustained 1X)
		Variable	1500 to 3600 KB/s (10X to 24X)
		Normal PIO Mode 4 (single burst)	16.66 MB/s
	Start-up Time	< 8 seconds	
	Stop Time	< 4 seconds	

Internal MDC 56K high speed Modem (Modem Specifications)	**Modem Device Driver Name**	
	Data Mode Capabilities	High speed 56K modem (a-law, mu-law) V.8bis V.80 V.44, V42.bis, MNP5 (Compression) V.42 (LAPM, MNP2-4) (Error Correction) V.34 (file date: 10/96) **Optional symbol rates:** 2800, 3429 Asymmetric Symbol rates **Synchronous primary channel data signaling rates:** 33600, 31200 Automatic rate re-negotiation V.32bis V.32 V.23 V.22bis V.22 V.21 Bell 212A Bell 103J

	Fax Mode Capabilities	TIA-578-S (Class 1) T.30, T.4 (Group 3) V.17 V.29 V.27ter V.21 Channel 2
	Command Set	V.250 (Partial) TIA-602 Identification: GMI, GMM, GMR Port control: IPR, ICF, IFC, Iirr Modulation: MS, MR, MA Error control: ES, ER, EB, ESR, ETBM Data compression: DS, DR V.251
	Power Consumption	Transfer mode: < 200 mA, maximum Standby mode: 5 mA, nominal
Integrated 10/100 NIC	Ethernet Features	10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14) 100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-30) Auto-Negotiation (Automatic Speed and Duplex Selection) HP Auto-MDIX Full Duplex and Half Duplex operation at 10 and 100 Mbit/s IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)
	Power Management	ACPI 1.1 compliant -- multiple power modes Situation-sensitive features reduce power consumption
	Manageability	PXE 2.0 Remote Boot Statistics Gathering (RMON, Ethernet-like MIB, Ethernet MIB (802.3x, clause 30)) Comprehensive diagnostic and configuration software suite
	NIC Device Driver Name	Broadcom 440x 10/100 Integrated Controller
	Drivers Available	Microsoft Windows XP, Windows 2000 DOS NDIS2 and ODI
HP W500 802.11a/b/g WLAN (availability may vary by region)	Wireless LAN Standards	IEEE 802 Part 11a (802.11a) IEEE 802. Part 11b (802.11b) IEEE 802. Part 11g (802.11g)
	Interoperability	Wi-Fi certified
	Frequency Band	2.4 and 5 GHz
	Data Rates	802.11a; 6,9,12,18,24,36,48,54 Mbps 802.11b; 1,2,5.5,11 Mbps 802.11g; 6,9,12,18,24,36,48,54 Mbps
	Modulation	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM

Security	64 and 128 bit WEP encryption Support for WiFi Protected Access (WPA) including TKIP, MIC Hardware-accelerated support for the Advanced Encryption Standard (AES; 256-bit encryption) Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP (Microsoft implementation) Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).	
Sub-channels	Multinational support with frequency bands and channels compliant to local regulations.	
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK	
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)	
Roaming	IEEE 802.11 compliant roaming between 802.11a and 802.11b/g access points	
Output Power	802.11b: 17 dBM (typical) 802.11a/g: 15 dBM (typical)	
Power Consumption	Transmit: 2.0 W (maximum) Receive: 1.5 W (maximum) Sleep mode: 20 mW (maximum)	
Power Management	ACPI compliant power management 802.11 Compliant Power Saving Mode Power Saving Mode selectable through the configuration utility	
Receiver Sensitivity*	54 Mbps: -70 dBm to 1 Mbps: -90 dbm	
Antenna type	High efficiency dual band antenna with polarization diversity, mounted in the display enclosure	
Range	802.11a - Typical	500 feet (152.44 m) - Outdoors Open Area 150 feet (45.73 m) - Indoor, Office-environment
	802.11 b - Typical	1200 feet (365.85 m) - Outdoor Open Area 300 feet (91.46 m) - Indoor, Office environment
	802.11 g - Typical	1000 feet (304.88 m) - Outdoor Open Area 200 feet (60.98 m) - Indoor, Office environment
Form Factor	MiniPCI Type IIIA	
Weight	0.036 lb (16.5 gm)	
Dimensions	0.19 x 2.00 x 2.35 in (4.8 x 50.95 x 59.75 mm)	
Operating Voltage	3.3 V	
Temperature	Operating Non-operating	32° to 122° F (0° to 50° C) -14° to 158° F (-10 to 70° C)
Humidity	Operating Non-operating	10 to 90% 5 to 95%
Altitude	Operating Non-operating	0 to 15,000 ft (4,572 m) 0 to 40,000 ft (12,192 m)
Configuration Utility	Choice of Configuration Utility: • Atheros Client Utility (required for Cisco Compatible Extensions support) • Microsoft Windows XP Wireless Zero Configuration Utility NOTE: May also be compatible with certain third party software supplicants.	

	LED Activity	LED Off - WLAN and Bluetooth Radio OFF; Solid Green LED - WLAN or Bluetooth Radio ON (please refer to your Tablet PC documentation to determine whether WLAN or Bluetooth is activated)

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation)

Intel Pro/Wireless 2100 802.11b WLAN	Wireless LAN Standards	IEEE 802. Part 11b (802.11b)	
	Interoperability	Wi-Fi certified	
	Frequency Band	2.4 GHz	
	Data Rates	802.11b; 1,2,5.5,11 Mbps	
	Modulation	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK	
	Security	64 and 128 bit WEP encryption Support for WiFi Protected Access (WPA) including TKIP, MIC Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP (Microsoft implementation) Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).	
	Sub-channels	Multinational support with frequency bands and channels compliant to local regulations.	
	Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK	
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)	
	Roaming	IEEE 802.11 compliant roaming between 802.11b access points	
	Output Power	16 dBM (typical)	
	Power Consumption	Transmit: 2.0 W (maximum) Receive: 1.5 W (maximum) Sleep mode: 200 mW, nominal	
	Power Management	ACPI compliant power management 802.11 Compliant Power Saving Mode	
	Receiver Sensitivity*	11 Mbps: -82 dBm to 1 Mbps: -89 dBm	
	Antenna type	High efficiency dual band antenna with polarization diversity, mounted in the display enclosure	
	Range	802.11b - Typical	1200 feet (365.85 m) - Outdoor Open Area 300 feet (91.46 m) - Indoor, Office environment
	Form Factor	MiniPCI Type IIIB	
	Weight	0.026 lb (11.75 gm) (maximum)	
	Dimensions	0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)	
	Operating Voltage	3.3 V	
	Temperature	Operating Non-operating	32° to 158° F (0° to 70° C) -40° to 176° F (-40° to 80° C)
	Humidity	Operating Non-operating	0 to 90% (non-condensing) 5 to 95% (non-condensing)
	Altitude	Operating Non-operating	0 to 10,000 ft (3,048 m) 0 to 50,000 ft (15,240 m)

	Configuration Utility	Choice of Configuration Utility: • Intel ProSet (required for Cisco Compatible Extensions support) • Microsoft Windows XP Wireless Zero Configuration Utility NOTE: May also be compatible with certain third party software supplicants.
	LED Activity	LED Off - Radio OFF; Solid LED - Radio ON

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation)

Intel Pro/Wireless 2200BG 802.11b/g WLAN	**Wireless LAN Standards**	IEEE 802.11b IEEE 802. 11g
	Interoperability	Wi-Fi certified (details available at http://www.hp.com/go/WLAN)
	Frequency Band	2.402 - 2.494 GHz
	Data Rates	802.11b: 1, 2, 5.5, 11 Mbps 802.11g: 6, 9, 12,18, 24, 36, 48, 54 Mbps
	Modulation	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM
	Security	64 and 128 bit WEP encryption Support for WiFi Protected Access (WPA) including TKIP, MIC Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP ((Microsoft implementation); more details available at http://www.hp.com/go/WLAN). Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).
	Sub-channels	Multinational support with frequency bands and channels compliant to local regulations.
	Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points.
	Output Power	16 ±2 dBM for CCK 11 +6/-1 dBM for OFDM (power varies by data rate) Maximum output power may vary by country according to local regulations
	Power Consumption	Transmit: 1.8 Watts (max) Receive: 1.0 Watts (max) Idle mode: 75mW, nominal
	Power Management	ACPI compliant power management 802.11 Compliant Power Saving Mode
	Receiver Sensitivity*	54 Mbps: -72 dBm, 11 Mbps: -84 dBm , 1 Mbps: -94 dBm
	Antenna type	High efficiency dual band antenna with polarization diversity, mounted in the display enclosure
	Range (typical)	Outdoor: 1200 feet at 1 Mbps; 250 feet at 54 Mbps Indoor: 300 feet at 1 Mbps; 50 feet at 54 Mbps
	Form Factor	MiniPCI Type IIIB
	Weight	0.026 lb (11.75 g) max
	Dimensions	0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)

Technical Specifications

Operating Voltage	3.3v	
Temperature	Operating Non-operating	32° to 158° F (0° to 70° C) -40° to 176° F (-40° to 80° C)
Humidity	Operating Non-operating	0 to 90% (non-condensing) 5 to 95% (non-condensing)
Altitude	Operating Non-operating	0 to 10,000 ft (3,048 m) 0 to 50,000 ft (15,240 m)
Configuration Utility	Choice of Configuration Utility: • Intel PROset for Microsoft Windows 2000 or XP (required for Cisco Compatible Extensions support) • Microsoft Windows XP Wireless Zero Configuration Utility NOTE: May also be compatible with certain third party software supplicants.	
LED Activity	LED Off – Radio OFF; Solid LED – Radio ON	

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation.

Intel Pro/Wireless 2915ABG 802.11a/b/g WLAN	Wireless LAN Standards	IEEE 802.11a IEEE 802.11b IEEE 802. 11g
	Interoperability	Wi-Fi certified (details available at http://www.hp.com/go/WLAN)
	Frequency Band	2.4 and 5 GHz
	Data Rates	802.11b: 1, 2, 5.5, 11 Mbps 802.11a/g: 6, 9, 12,18, 24, 36, 48, 54 Mbps
	Modulation	Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM
	Security	Supports 64- and 128-bit WEP, WPA, hardware-accelerated AES, 802.1x authentication types EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP, EAP-FAST. Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).
	Sub-channels	Multinational support with frequency bands and channels compliant to local regulations.
	Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
	Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Point Required)
	Roaming	IEEE 802.11 compliant roaming between access points.
	Output Power	+16 dBm +/- 2dB'+16 dBm +/- 2dB (for CKK) +15 dBm + 2 / -5 dB ((for OFDM; power varies by data rate)
	Power Consumption	Transmit: 1.8 Watts (max) Receive: 1.4 Watts (max) Idle mode: 100 mW, nominal
	Power Management	ACPI compliant power management 802.11 Compliant Power Saving Mode
	Receiver Sensitivity*	54 Mbps: -72 dBm, 11 Mbps: -89 dBm , 1 Mbps: -97 dBm
	Antenna type	High efficiency dual band antenna with polarization diversity, mounted in the display enclosure

	Range (typical)	802.11a - Typical	600 ft (82.88 m) at 1 Mbps - Outdoors Open Area 150 ft (45.72 m) at 1 Mbps - Indoor, Office-environment
		802.11b - Typical	1200 ft (365.76 m)at 1 Mbps - Outdoors Open Area 300 ft (91.44 m) at 1 Mbps - Indoor, Office-environment 250 ft (76.2 m)at 54 Mbps - Indoor, Office-environment
		802.11g - Typical	1200 ft (365.76 m) at 1 Mbps - Outdoors Open Area 300 ft (91.44 m) at 1 Mbps - Indoor, Office-environment 50 ft (15.24 m)at 54 Mbps - Indoor, Office-environment
	Form Factor	MiniPCI Type IIIB	
	Weight	0.026 lb (11.75 gm) (max)	
	Dimensions	0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)	
	Operating Voltage	3.3v +/- 10%	
	Temperature	Operating Non-operating	32° to 176°F (0° to 80°C) -40° to 176°F (-40° to 80°C)
	Humidity	Operating Non-operating	10% to 90% (non-condensing) 5% to 95% (non-condensing)
	Altitude	Operating Non-operating	0 to 10,000 ft (3,048 m) 0 to 50,000 ft (15,240 m)
	Configuration Utility	Microsoft Windows XP Wireless Zero Configuration Utility Intel PROset for Microsoft Windows 2000 or XP	
	LED Activity	LED Off – Radio OFF; Solid LED – Radio ON	

*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation.

Bluetooth by HP	**Form Factor**	Integrated USB module	
	Bluetooth	1.1 Compliant	
	Dimensions	26 x 14 x 5.7 mm	
	Temperature	Operating	-4° to 158° F (-20° to 70° C)
		Non-operating	-40° to 176° F (-40° to 80° C)
	Humidity	10 to 90% operating	
		5 to 95% non operating	
	Altitude	Operating	15,000 ft (4572 m)
		Non-operating	40,000 ft (12,192 m)
	Plug and Play	USB 1.1 compliant	
		Microsoft Windows Plug and Play compliant	
	Frequency Band	2402 to 2480 MHz	
	Number of Available Channels	79 (1 MHz) available channels	

Data Rates and throughput	1 Mbps Synchronous Connection Oriented links up to 3, 64 kbps, voice channels Asynchronous Connection Less links 723.2 kbps/57.6 kbps asymmetric or 433.9 kbps symmetric
Antenna type	Internally integrated within module
Range	33 ft (10 m)
Software Stack Supported	User may choose: Microsoft User Interface (Profiles supported: HID, DUN, HCRP) Widcomm User Interface (see profile support below)
Profile Support	General Access Profile Service Discovery Application Profile Serial Port Profile Generic Object Exchange Profile File Transfer Profile Synchronization Profile Dial-Up Networking Profile LAN Access Profile Object Push Profile Hard Copy Cable Replacement Profile Personal Area Networking Profile Human Interface Device Profile
Usage Models	Service Discovery (determine what Bluetooth devices are within range and support authorization) Synchronization: PDAs to PCs Portable to Desktop File Transfer: File and directory browsing and navigation on another Bluetooth device. File copying Object manipulation - including add, delete, create new folders etc. Wireless link to Corporate LAN using several Bluetooth devices sharing the same Access Point: Corporate email, network neighborhood, access to LAN applications, file transfer, ftp, Internet browsing, etc, using TCP/IP Wireless link to WAN thru cell phone Agnostic to WAN technology Send/receive SMS messages Wireless link to Printer Adhoc peer to peer networking (two computers) or Personal Area Networking (PAN) using NDIS (< 7 computers) Adhoc Bluetooth Pico-networking (point to multi-point) Object Push - Business card or appointment exchange Human Interface Devices Wirelessly interface to notebook with mouse, keyboard, etc Printing Wirelessly print to Bluetooth enabled printers
Transmit Power	-6dBm to 4 dBm (Bluetooth Class II)

Technical Specifications

Receive Sensitivity	Better than -80 dBM at 0.1 % raw bit error rate
Link Topology	Point to Point, Multipoint Pico Nets up to 7 slaves
Security	Full support of Bluetooth Security Provisions
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Points Required)
Power Requirement	Peak < 270 mW
Power Management	Microsoft Windows ACPI, and USB Bus Support Wireless EAB On/Off Software On/Off control Self configurable to optimize power conservation in all operating modes, including Standby, Hold, Park, and Sniff
Protocols Supported	TCP/IP IPX/SPX UDP
LED Activity	Solid Green LED - Wireless Bluetooth or WLAN On LED Off - Wireless Bluetooth and WLAN Power Off (please refer to your Tablet PC documentation to determine whether WLAN or Bluetooth is activated)
Certifications	All necessary regulatory approvals for countries we support including FCC (47 CFR) Part 15C, Section 15.247 & 15.249 ETS 300 328, ETS 300 826 Low Voltage Directive IEC950 UL, CSA, and CE Mark

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